

Claim Amendments

1. (currently amended) A hydrojetting tool for use in a wellbore, comprising [a plurality of jetting modules, wherein]:

at least three jetting modules;

each jetting module ~~[[has]]~~ having jetting nozzles therein adapted for jetting fluid into a formation adjacent the wellbore; and

a sleeve disposed in all but one of the jetting modules;

wherein each sleeve is moveable from a first position covering the jetting nozzles in the corresponding jetting module to a second position covering the jetting nozzles in an adjacent jetting module, so that the jetting modules may be operated sequentially.

2-6. (cancelled).

7. (original) The tool of claim 6 further comprising a plurality of plugs, wherein each plug is adapted for engagement with a corresponding one of the sleeves for moving the sleeve from its first position to its second position.

8. (original) The tool of claim 7 wherein the plugs may be further pumped through the corresponding sleeve after moving the sleeve from the first position to the second position.

9. (currently amended) The tool of claim ~~[[6]]~~ 1 wherein the jetting module without a sleeve therein is a lowermost jetting module.

10. (original) The tool of claim 1 wherein the jetting nozzles are replaceable.

11. (original) A hydrojetting tool for use in a wellbore, comprising:

a plurality of jetting modules, wherein each jetting module has jetting nozzles therein adapted for jetting fluid into a formation adjacent the wellbore; and

a sleeve slidably disposed in all but one of the jetting modules, wherein each sleeve has a first position covering the jetting nozzles in the corresponding jetting module and is moveable to a second position uncovering the jetting nozzles in the corresponding jetting module and covering the jetting nozzles in an adjacent jetting module.

12. (original) The tool of claim 11 wherein the sleeves may be moved sequentially such that the jetting modules may be operated sequentially.

13. (original) The tool of claim 11 wherein the sleeves are moved downwardly from the first to second positions thereof.

14. (original) The tool of claim 13 further comprising a plurality of plugs, wherein each plug may be pumped into engagement with a corresponding one of the sleeves for moving the corresponding sleeve from its first position to its second position.

15. (original) The tool of claim 14 wherein each sleeve comprises:

an upper sleeve portion which covers the jetting nozzles in the corresponding jetting module when the sleeve is in the first position;

a lower sleeve portion which covers the jetting nozzles in the adjacent jetting module when the sleeve is in the second position; and

an inwardly extending mandrel disposed between the upper and lower sleeve portions and adapted for engagement by the corresponding plug.

16. (original) The tool of claim 15 wherein the mandrels define holes therein, the holes being progressively larger from a lowermost sleeve to an uppermost sleeve.

17. (original) The tool of claim 14 wherein the plugs may be further pumped through the tool after moving the corresponding sleeve from its first position to its second position.

18. (original) The tool of claim 11 wherein the jetting module not having a sleeve therein is a lowermost jetting module.

19. (original) The tool of claim 18 wherein the lowermost jetting module has a shoulder therein for limiting movement of the sleeve in the adjacent jetting module.

20. (original) The tool of claim 11 wherein the jetting nozzles are replaceable.

21. (original) A hydrojetting tool for use in a wellbore, comprising:
a plurality of jetting modules, wherein each jetting module has jetting nozzles therein adapted for jetting fluid into a formation adjacent the wellbore;

a sleeve slidably disposed in all but one of the jetting modules, wherein each sleeve has a first position covering the jetting nozzles in the corresponding jetting module and is moveable to a second position uncovering the jetting nozzles in the corresponding jetting module and covering the jetting nozzles in an adjacent jetting module; and

a plurality of plugs, wherein each plug is adapted for being pumped into engagement with a corresponding one of the sleeves and thereby moving the corresponding sleeve from its first position to its second position.

22. (original) The tool of claim 21 wherein the sleeves may be engaged and moved sequentially such that the jetting modules may be operated sequentially.

23. (original) The tool of claim 21 wherein the sleeves are moved downwardly from the first to second positions thereof.

24. (original) The tool of claim 21 wherein each sleeve comprises:
an upper sleeve portion which covers the jetting nozzles in the corresponding jetting module when the sleeve is in the first position;

a lower sleeve portion which covers the jetting nozzles in the adjacent jetting module when the sleeve is in the second position; and

an inwardly extending mandrel disposed between the upper and lower sleeve portions and adapted for engagement by the corresponding plug.

25. (original) The tool of claim 24 wherein the mandrels define holes therethrough, the holes being progressively larger from a lowermost sleeve to an uppermost sleeve.

26. (original) The tool of claim 21 wherein the plugs may be further pumped through the tool after moving the corresponding sleeve from the first position to the second position.

27. (original) The tool of claim 21 wherein the jetting module not having a sleeve therein is a lowermost jetting module.

28. (original) The tool of claim 21 wherein the jetting nozzles are replaceable.

29. (original) A method of treating a formation located adjacent a wellbore, comprising the steps of:

providing a tool comprising first and second jetting modules, wherein each jetting module has at least one jetting nozzle therein adapted for jetting fluid into the formation;

positioning the tool adjacent the formation;

pumping fluid to the tool, wherein the fluid is jetted out the at least one jetting nozzle in the first jetting module but not out the at least one jetting nozzle in the second jetting module; and

pumping a plug to the tool, wherein fluid stops being jetted out the at least one jetting nozzle in the first jetting module and starts being jetted out the at least one jetting nozzle in the second jetting module.

30. (new) A method of treating a subsurface formation comprising:

positioning a tool with a plurality of jetting modules adjacent the formation wherein each jetting module has jetting nozzles;

jetting a treating fluid into the formation through the jetting nozzles in a first of the jetting modules; and

shifting a sleeve in the tool to cover the jetting nozzles in the first of the jetting modules and to uncover the nozzles in an adjacent second of the jetting modules wherein the sleeve is originally positioned to cover the nozzles in the second of the jetting modules.

31. (new) The method of claim 30, further comprising:

pumping a ball into the tool;

engaging a seat in the sleeve with the ball; and

increasing pressure to move the sleeve and cover the jetting nozzles in the first of the jetting modules and to uncover the jetting nozzles in the adjacent second of the jetting modules.

32. (new) The method of claim 31, further comprising jetting a treating fluid into the formation through the jetting nozzles in the second of the jetting modules.

33. (new) The method of claim 30, the tool with the plurality of jetting modules comprising one less sleeve than jetting modules, the method further comprising jetting through the nozzles in at least a portion of the plurality of jetting modules sequentially beginning with the nozzles in the first jetting module and moving sleeves in the tool to uncover the jetting nozzles in the jetting module adjacent the jetting module with the immediately previously used jetting nozzles and to cover the nozzles in the module with the immediately previously used jetting nozzles, until the jetting nozzles in a desired number of modules have been utilized.

34. (new) The method of claim 33 further comprising performing the steps of claim 33 until the jetting nozzles in all of the plurality of jetting modules have been used.

35. (new) The method of claim 30, wherein the treating fluid is a fracturing fluid containing a proppant.

36. (new) The method of claim 29 wherein the fluid comprises a fracturing fluid containing proppant.